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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LANIER, BENJAMIN E

ART UNIT PAPER NUMBER

2132

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/670,242

Applicant(s)

ISHIKAWA ET AL.

Examiner

Benjamin E Lanier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-82 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 14 March 2005 have been fully considered but they are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., branding as indicia of ownership with respect to licensing rights and copyright ownership of the source file) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

2. Applicant's argument that Hull does not disclose creating a key template comprising a plurality of elements, wherein each element is defined by an element size, a quantity, a start position and an initial position is not persuasive because Hull discloses an image matching system wherein an image is scanned in and sent to a feature extractor that operates on a set of descriptor rules (Fig. 2), which meets the limitation of creating a key template comprising a plurality of elements. These descriptor rules are used to extract features from the image such as interesting points at relative positions and word length sequences (Col. 20, line 65 – Col. 21, line 1), which meets the limitation of each element is defined by an element size, a quantity, a start position and an initial position.

3. Applicant's arguments with respect to claims 7, 9-11, 40, 76-80 fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 12-20, 37-39, 42-47, 50, 52-55, 57-73, 75, 81, 82 are rejected under 35

U.S.C. 102(b) as being anticipated by Jones, WO 95/15522. Referring to claims 1, 3-6, 12, 16,

17, 20, 37, 42-44, 47, 50, 52-55, 57-73, 75, 81, Jones discloses a data verification system

wherein a user can have a file, they created, fingerprinted at a central computer (Page 2, lines 19-

27), which meets the limitation of receiving a source file from data owners and creating a

fingerprint for the source file by recording portions of the source file that correspond to each of

the elements of the template. With regards to the limitations involving the template and the key

in the source file, Jones discloses that file selected is fingerprinted using a preselected technique

that produces a fingerprint unique to the content of the document. The fingerprint includes a

cyclic redundancy check value for the file along with the file size (Page 11, line 35 – Page 12,

line 7). Once generated the fingerprint and file are stored in a database at the central computer

that corresponds to the owner (Page 3, lines 9-17), which meets the limitation of storing the

source file and fingerprint in a database. The fingerprint can then be compared to the fingerprint

of an unknown file in order to verify that the files are the same (Page 2, lines 30-36), which

meets the limitation of comparing unknown data files to the fingerprint stored in the database to

determine whether the unknown data files are copies of any portion of the source file.

Referring to claims 2, 14, 38, 39, Jones discloses that the file can be time stamped (Page 3, lines 1-2), which meets the limitation of branding the source file.

Referring to claim 15, 18, Jones discloses the fingerprint includes a cyclic redundancy check value for the file along with the file size (Page 11, line 35 – Page 12, line 7).

Referring to claims 45, 46, 68, Jones discloses that the fingerprints can be changed (Page 7, lines 3-12).

Referring to claim 82, Jones discloses a data verification system wherein a user can have a file, they created, fingerprinted at a central computer (Page 2, lines 19-27), which meets the limitation of selecting a sample quantity parameter, wherein the sample quantity parameter is equal to a number of samples to be taken from the data file, selecting at least one sample length parameter, wherein the sample length parameter is associated with a length of samples to be taken from the data file, selecting a start location, wherein the start location is associated with at least one of a physical beginning of the data file or a logical beginning of the data file, selecting a relative position parameter, wherein the relative position parameter is associated with a location from which samples are to be taken, relative to the start location, selecting a plurality of predetermined sampling rules, extracting a plurality of fingerprint elements from the data file using the defined fingerprint key, and concatenating the plurality of fingerprint elements, wherein a fingerprint that uniquely identifies the data file is created.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 21-36, 41, 48, 49, 51, 56, 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones, WO 95/15522, in view of Hull, U.S. Patent No. 5,465,353. Referring to claims 21-23, 29, 30, 48, 51, 74, Jones discloses a data verification system wherein a user can have a file, they created, fingerprinted at a central computer (Page 2, lines 19-27), which meets the limitation of receiving a source file from data owners and creating a fingerprint for the source file by recording portions of the source file that correspond to each of the elements of the template. With regards to the limitations involving the template and the key in the source file, Jones discloses that file selected is fingerprinted using a preselected technique that produces a fingerprint unique to the content of the document. The fingerprint includes a cyclic redundancy check value for the file along with the file size (Page 11, line 35 – Page 12, line 7). Once generated the fingerprint and file are stored in a database at the central computer that corresponds to the owner (Page 3, lines 9-17), which meets the limitation of storing the source file and fingerprint in a database. The fingerprint can then be compared to the fingerprint of an unknown file in order to verify that the files are the same (Page 2, lines 30-36), which meets the limitation of comparing unknown data files to the fingerprint stored in the database to determine

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whether the unknown data files are copies of any portion of the source file. Jones does not disclose normalizing the files before fingerprinting. Hull discloses that the images are normalized before comparing (Col. 3, line 53 – Col. 4, line 11), which meets the limitation of normalizing the source file before identifying the elements in the key, adjusting the rate of sampling the elements in the target file to the rate of sampling the elements in the key in the source file, normalizing the source file before identifying the elements in the key, and adjusting the rate of sampling the elements in the target file to the rate of the sampling the elements in the key in the source file. It would have been obvious to one of ordinary skill in the art at the time the invention was made to normalize the files before fingerprinting in order to increase the probability that any differences between a source file and a suspect file exist because the files are truly different.

Referring to claims 24-36, 41, 49, 56, Jones discloses a data verification system wherein a user can have a file, they created, fingerprinted at a central computer (Page 2, lines 19-27), which meets the limitation of receiving a source file from data owners and creating a fingerprint for the source file by recording portions of the source file that correspond to each of the elements of the template. With regards to the limitations involving the template and the key in the source file, Jones discloses that file selected is fingerprinted using a preselected technique that produces a fingerprint unique to the content of the document. The fingerprint includes a cyclic redundancy check value for the file along with the file size (Page 11, line 35 – Page 12, line 7). Once generated the fingerprint and file are stored in a database at the central computer that corresponds to the owner (Page 3, lines 9-17), which meets the limitation of storing the source file and fingerprint in a database. The fingerprint can then be compared to the fingerprint of an

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unknown file in order to verify that the files are the same (Page 2, lines 30-36), which meets the limitation of comparing unknown data files to the fingerprint stored in the database to determine whether the unknown data files are copies of any portion of the source file. Jones does not disclose the scanning of test files to find potential matches to the source file. Hull discloses stored files are compared to a group of test images (Col. 16, lines 33-37) that are scanned and hashed (Col. 16, line 40 – Col. 18, line 24), which meets the limitation of searching the network for unknown files, downloading unknown files to a data management server, and recording portions of the unknown files that correspond to each of the elements in the key template to create a fingerprint for the unknown file. The files are then compared and a count is kept of all the matching descriptors. After the matching has finished the image with the highest number of matches is compared to the corresponding file in the database (Col. 18, line 64 – Col. 19, line 7), which meets the limitation of comparing the fingerprint of the unknown file to the fingerprint of the source file, assigning a probability matching level for the unknown file based upon the comparison results of the comparison between the fingerprint of the unknown file and the fingerprint of the source file. It would have been obvious to one of ordinary skill in the art at the time the invention was made to scan a database of files in the system of Jones in order to provide the owner/author of the files in Jones with the ability to scan for copies of their property.

9. Claims 7, 9-11, 40, 76-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones, WO 95/15522, in view of Chow, U.S. Patent No. 6,292,092. Referring to claims 7, 9-11, 40, 76-80, Jones discloses a data verification system wherein a user can have a file, they created, fingerprinted at a central computer (Page 2, lines 19-27), which meets the limitation of receiving a source file from data owners and creating a fingerprint for the source file by recording portions



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of the source file that correspond to each of the elements of the template. With regards to the limitation involving the template, Jones discloses that file selected is fingerprinted using a preselected technique that produces a fingerprint unique to the content of the document. The fingerprint includes a cyclic redundancy check value for the file along with the file size (Page 11, line 35 – Page 12, line 7). Once generated the fingerprint and file are stored in a database at the central computer that corresponds to the owner (Page 3, lines 9-17), which meets the limitation of storing the source file and fingerprint in a database. The fingerprint can then be compared to the fingerprint of an unknown file in order to verify that the files are the same (Page 2, lines 30-36), which meets the limitation of comparing unknown data files to the fingerprint stored in the database to determine whether the unknown data files are copies of any portion of the source file. Jones discloses that the file can be time stamped (Page 3, lines 1-2), which meets the limitation of branding the source file. Jones does not disclose that the embedded authentication information can be encrypted and embedded into the source file. Chow discloses an image identification system wherein authentication information is encrypted and affixed (embedded) into the source image (Col. 3, lines 13-17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to encrypt the authentication information of Jones in order to protect the data as taught in Chow (Col. 3, lines 18-20).

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones, WO 95/15522, in view of Chow, U.S. Patent No. 6,292,092. Referring to claim 8, Jones discloses a data verification system wherein a user can have a file, they created, fingerprinted at a central computer (Page 2, lines 19-27), which meets the limitation of receiving a source file from data owners and creating a fingerprint for the source file by recording portions of the source file that

correspond to each of the elements of the template. With regards to the limitation involving the template, Jones discloses that file selected is fingerprinted using a preselected technique that produces a fingerprint unique to the content of the document. The fingerprint includes a cyclic redundancy check value for the file along with the file size (Page 11, line 35 – Page 12, line 7). Once generated the fingerprint and file are stored in a database at the central computer that corresponds to the owner (Page 3, lines 9-17), which meets the limitation of storing the source file and fingerprint in a database. The fingerprint can then be compared to the fingerprint of an unknown file in order to verify that the files are the same (Page 2, lines 30-36), which meets the limitation of comparing unknown data files to the fingerprint stored in the database to determine whether the unknown data files are copies of any portion of the source file. Jones does not disclose that the fingerprint is created using the average color values for predefined portions of the source file. Chow discloses an image identification system wherein to create the image fingerprint, certain features of the image are extracted and weighted averages are calculated. These features are only based on luminance (color values) components of the picture (Col. 4, lines 22-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made for the source file of Jones to be an image and the fingerprint calculated using the function of Chow in because the weighing functions are highly non-linear and it is very difficult to create an image which would have the same averages and yet the image contain a face or signature of a specific person as taught in Chow (Col. 4, lines 37-40).

### ***Conclusion***

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E Lanier whose telephone number is 571-272-3805.

The examiner can normally be reached on M-Th 7:30am-5:00pm, F 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Benjamin E. Lanier



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